What is claimed is:

1. A system for measuring the three-dimensional shape of a transparent thin film using an acousto-optic tunable filter, comprising:

a light source for emitting white light;

a second beam splitter for reflecting and transmitting the white light emitted from the light source to split the white light and irradiate the split monochromatic light beams toward a reference mirror plane and a measurement object;

a Michelson interferometer module located between the second beam splitter and reference mirror plane, to correspond to a reflection angle of the second beam splitter, the Michelson interferometer module including a blocking plate for selectively blocking the white light beam irradiated on the reference mirror plane;

an acousto-optic tunable filter located in the traveling direction of white light selectively reflected from the reference mirror plane according to whether the white light is blocked or not and white light reflected from the measurement object, and adapted to select a monochromatic light beam of a specific wavelength band from the white light irradiated on the surface thereof;

a first beam splitter of non-polarized cubic type located to correspond to the projection direction of white

light emitted from the light source and the projection direction of white light emitted from the second beam splitter 32, and adapted to allow reflection and transmission of white light to be sequentially carried out among the light source, the second beam splitter and the acousto-optic tunable filter; and

a CCD sensor on which the monochromatic light beam selected by the acousto-optic tunable filter is irradiated to form a spectral image.

2. The system as claimed in claim 1, wherein the measurement object is composed of a metal layer with a patterned surface formed on a wafer and a thin film with a patterned surface formed on the metal layer.

3. The system as claimed in claim 1, further comprising a single-mode optical fiber one end of which is connected to the light source in the projection direction of white light emitted from the light source and the other end of which is fixed to correspond to a reflection angle of the first beam splitter.

4. The system as claimed in claim 3, further comprising a first convex lens located between the single-mode optical fiber and the first beam splitter so that light

width according to the traveling direction of white light projected from the single-mode optical fiber is aligned before the white light is irradiated to the first beam splitter.

5. The system as claimed in claim 1, wherein the Michelson interferometer module further includes a second convex lens placed between the first and second beam splitters so as to focus the white light on the second beam splitter.

6. The system as claimed in claim 1, further comprising a third convex lens located between the CCD sensor and the acousto-optic tunable filter so as to focus the selected monochromatic light on the CCD sensor.

7. The system as claimed in claim 1, wherein the reference mirror plane is a plane reflection mirror located to correspond to the irradiating direction of the white light.